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DSK	В	4,701,904	10/20/87	Darcie	370	3	
D5K	С	4,953,156	8/28/90	Olshansky et al.	370	3	9/8/88
D4K	D	5,351,148	9/27/94	Maeda et al.	359	124	5/26/93
DLIK	E	5,387,927	2/7/95	Look et al.	348	6	9/17/93
251	F	5,430,568	06/04/95	Little et al.	359	124	
D5K	G	5,559,561	9/24/96	Wei	348	470	7/15/94
D6K	Н	5,576,874	11/19/96	Czerwiec et al.	359	123	
05K	ł	5,596,436	1/21/97	Sargis et al.	359	132	7/14/95
05/2	J	5,680,238	10/21/97	Masuda	359	132	11/9/95

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Transla	ation
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2514	K	EP 0 717 521 A	06/19/96	EP			No	0
DSK	L	EP 0 756 393 A1	29.01.97	EP			No	•
								·

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Tria		Business Wire, "Harmonic Lightwaves Announces Availability of First MCNS-Compliant QAM
DSR		Modulator; TRANsend QAM is a Vital Component for Delivering Digital Services", November 18, 1997
(1/		Dai, H., C. Lin, M. Ramachandran, "Hybrid AM/QAM Video Trunking Lightwave Systems With
D5K		Cascaded EDFAs", Conf. Proc. LEOS, 97 Annual Meeting, IEEE Lasers & Electro Optic Society, 1997,
` '		Vol. 1, pp. 319-320
DGK	0	Douverne, E., M. Ottka, K. Ruthemann, K. Siegel, "Ein 64-QAM-Modem für SDH-Richtfunkgeräte mit
1750		integriertem Kreuzpolarisationsentkoppler", Vol. 40, No. 11, 1 March 1994, pages 89-100

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EXAMINER: Initial if references considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

PTO-1449 REV: 02/01

Attorney's Docket No Sheet 2 of 3 FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE 09/474,659 (REV. 6-89) Patent and Trademark Office Ting K. Yes and Peter Chang INFORMATION DISCLOSURE CITATION Applicant **2** roup Art Unit Filing Date (Use several sheets if necessary) December 29, 1999 2733 **U.S. PATENT DOCUMENTS** Filing Date If Examiner initial **Document Number** Name Class **Subclass** Appropriate **FOREIGN PATENT DOCUMENTS** Translation **Document** Country Class Subclass Yes No Number OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) Fuse, M., Y. Kudo, K. Maeda, "Development of 128 Optical Distribution System of 150 chs AM/QAM Hybrid Signals". Electronics and Communications in Japan. November 1996, Volume 79, Issue 11, Part 1, pp. 65-77 Green, P., "Fiber Optic Networks", 1993, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, p. 331, line 4 - line 7, figure 9-1 Hiramatsu, A. et al., "Hypermedia Photonic Information Network Based on WDM-SCM Broadcast and Select Switching," Conference Proceedings, Leos '96 9th Annual Meeting, IEEE Lasers and Electro-Optics Society 1996 Annual Meeting (Cat. No. 96CH35895), Boston, MA, November 18-19, 1996, pp. Ho, K., H. Dai, C. Lin, "Hybrid WDM Digital Trunking System for both HFC and FTTC Access Networks", Digest IEEE/LEOS 1996 Summer Topical Meetings (Cat. No. 96th 8164), NY, NY, pp. 37-38 Kanno, N., K. Ito, "Fiber Optic Subcarrier Multiplexing Transport for Broadband Subscriber Distribution Network", IEEE Intl. Conference on Communications Boston ICC/89 World Prosperity Through Communications, June 11-14, 1989, Boston, MA, Volume 2, pp. 996-1003 Kavehrad, M., E. Savov, "Fiber-Optic Transmission of Microwave 64-QAM Signals", IEEE Journal on Selected Areas in Communications, Vol. 8, No. 7, September 1990, pp. 1320-1326 LeBer, J., M. LeLigne, "Digital Transmission on Electric Subcarriers in Optical Fiber Videocommunication Systems", Optics Communications, October 15, 1987, Volume 64, No. 2, pp. 120-126 Li, J., K. Yano, "Development of AM/QAM Hybrid Optical SCM Transmission System", Proc Intl Conf. On Communication Technology ICCT '96, May 5-7,1996, Beijing, China, Volume 1, pp. 575-577 Lu, X., G.E. Bodeep, T.E. Darcie, "Broad-Band AM-VSB/64 QAM Cable TV System Over Hybrid Fiber/Coax Network," IEEE Photonics Technology Letters, Vol. 7, No. 4, April 1995, pp. 330-332 Nakamura, Y., H. Ohtsuka, S. Aikawa, H. Takanashi, "Advanced Techniques for Super Multi-Carrier Digital Microwave Radio With Trellis-Coded 256 QAM Modulation", NTT Radio Communication Systems Laboratories), pp. 389-394 Nishikido, J. et al., "Multiwavelength Securely-Authenticated Broadcast Network" 11th International Conference on Integrated Optics and Optical Fibre Communications, 23rd European Conference on Optical Communications IOOC-ECOC 97 (Conf. Publ. No. 448), Sept. 22, 1997, pp. 17-20 DATE CONSIDERED SEPTEMBER 27.2002

EXAMINER: Initial if references considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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75K	AA		NTT Radio	•			smission fo	r Broadband	
75K	Distribution Networks", NTT Radio Communications Systems Laboratories, GlobeCom '91, pp. 1817-1822 BB Park, J., A. Elrefaie, K. Lau, "1550-nm Transmission of Digitally Modulated 28-GHz Subcarriers Over 7" km of Nondispersion Shifted Fiber", IEEE Photonics Technology Letters, February 1997, Volume 9, Issue 2, pp. 256-258								
2515	СС	Ryan, J., "WDM: North 1998, pp. 40-44.	American	Deployment T	rends," <i>IEEE Commu</i>	nications	s Magazine	, February	
75K	DD	Schlump, Dieter et al.: 100 km standard fibre a OPTICAL COMMUNIC	at 10 Gbit/s	" PROCEEDIN	IGS OF THE EUROP				
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75K	FF	Tai, C., Pi-Yang Chiang Utilizing a 1.3-µm Exter Technology Letters, Vo	g, W. Way, nal Modula	"Eight-Way, 70 tion System ar)-km Transmission of nd Semiconductor Opt	33-Char	nnel 64-QA	M Signals	
V5/K		Tang, D., "Multi-Gigabi IEEE 1989 MTT-S Intl. 697-701	Microwave	Symp Digest,	June 13-15, 1989, Lo	ng Beac	ch, CA, Vol	ume 2, pp.	
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